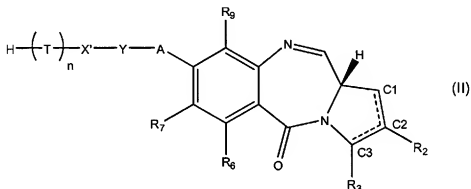


Listing of Claims

1-38. Canceled

39. (Previously presented) A collection of compounds all of which are represented by formula II:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

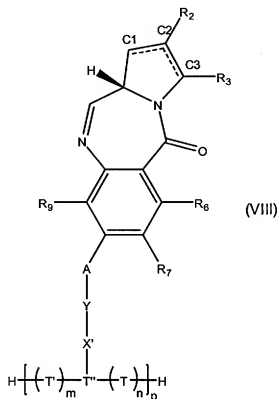
X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1; and

n is a positive integer from 1 to 16.

40. (Previously presented) A collection of compounds according to claim 39 wherein R and HY are independently selected from lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms, or an aryl group of up to 12 carbon atoms, optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

41. (Previously presented) A collection of compounds according to claim 39, wherein R and HY are independently selected from lower alkyl groups having 1 to 10 carbon atoms optionally substituted by one or more halo, hydroxy, amino, or nitro groups.
42. (Previously presented) A collection of compounds according to claim 39, wherein R or HY are independently selected from unsubstituted straight or branched chain alkyl groups, having 1 to 10 carbon atoms.
43. (Previously presented) A collection of compounds according to claim 39 wherein R₇ is an electron donating group.
44. (Previously presented) A collection of compounds according to claim 39 wherein R₈ and R₉ are H.
45. (Previously presented) A collection of compounds according to claim 39, wherein R₂ and R₃ of are H.
46. (Previously presented) A collection of compounds according to claim 45, wherein R₇ is an alkoxy group.
47. (Previously presented) A collection of compounds according to claim 39 wherein there is no double bond between C2 and C3.
48. (Previously presented) A collection of compounds according to claim 39, wherein -Y-A- is an alkoxy chain.
49. (Previously presented) A collection of compounds according to claim 39, wherein X' is either CO or NH.
50. Canceled.
51. (Currently amended) A collection of compounds all of which are represented by formula VIII:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

n is a positive integer from 1 to 16[;] and m is 1, except that one of n or m may be zero;

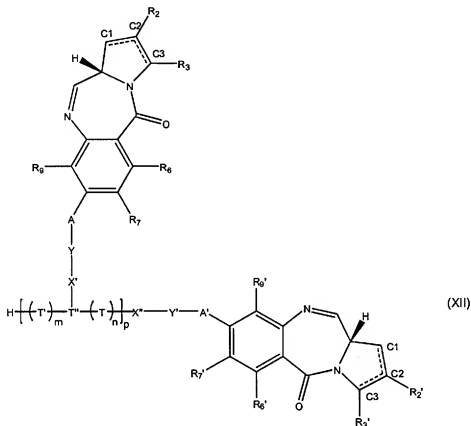
m is a positive integer from 1 to 16;

T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is 1.

52. (Currently amended) A collection of compounds all of which are represented by formula XII:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro

groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that $HY = R$;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

n is a positive integer from 1 to 16[~~1~~] and m is 1, except that one of n or m may be zero;

m is a positive integer from 1 to 16;

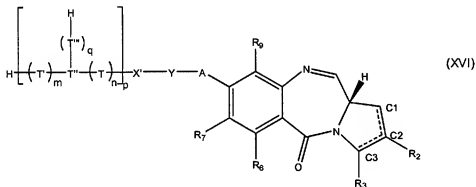
T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is 1; and

X'', Y', A', R', R', R', R', R', R' are selected from the same possibilities as X', Y, A, R₁, R₂, R₃, R₆, and R₉ respectively.

53. (Currently amended) A collection of compounds all of which are represented by formula XVI:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double

or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that $HY = R$;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

n is a positive integer from 1 to 16[(:)] and m is 1, except that one of n or m may be zero;

m is a positive integer from 1 to 16;

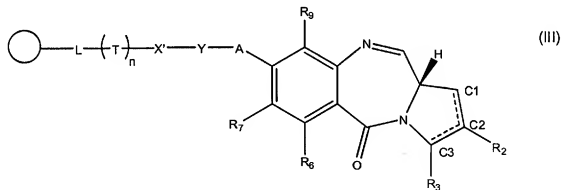
T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is 1; and

T''' and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, the meanings of T, T', T'', T''' and values of n, m and q may be independently selected.

54. (Previously presented) A collection of compounds all of which are represented by formula III:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that $HY = R$;

X' is CO, NH, S or O;

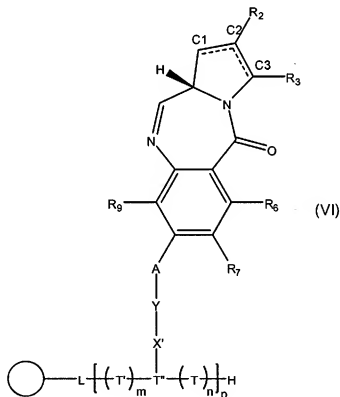
T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

n is a positive integer from 1 to 16;

L is a linking group, or a single bond; and

⊙ is a solid support.

55. (Currently amended) A collection of compounds all of which are represented by formula VI:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₈ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

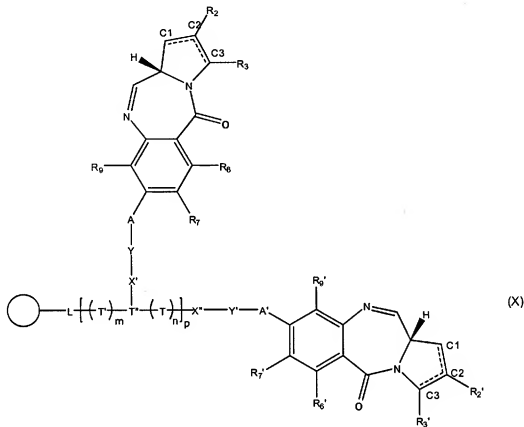
~~n and m are~~ s is a positive integer[[s]] from 1 to 16[[.]] and m is 1, or except that one of them may be zero;

~~T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;~~

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is 1.

56. (Currently amended) A collection of compounds all of which are represented by formula X:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

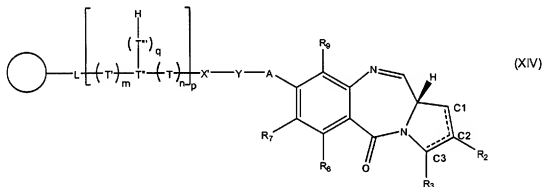
n and m are is a positive integer [s] from 1 to 16 [i], and m is 1, or except that one of them may be zero;

T' is an amino acid residue combinatorial unit, ~~where each T' may be different if m is greater than 1;~~

T'' is an amino acid combinatorial unit which provides a site for the attachment of X'; p is 1; and

X'', Y', A', R₂, R₃, R₆, R₇ and R₉ are selected from the same possibilities as X', Y, A, R₂, R₃, R₆, R₇ and R₉.

57. (Currently amended) A collection of compounds all of which are represented by formula XIV:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that $HY = R$;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are is a positive integer[s] from 1 to 16[.1] and m is 1, or except that one of them may be zero;

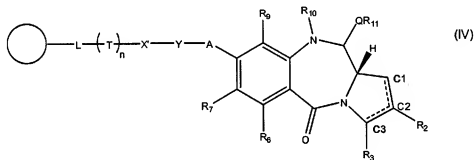
T' is an amino acid residue combinatorial unit, ~~where each T' may be different if m is greater than 1;~~

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is 1; and

T''' and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, for each repeating unit the meaning of T, T', T'', T''' and the values of n, m and q may be independently selected.

58. (Previously presented) A collection of compounds all of which are represented by formula IV:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double

or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that $HY = R$;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

n is a positive integer from 1 to 16;

R₁₁ is either H or R;

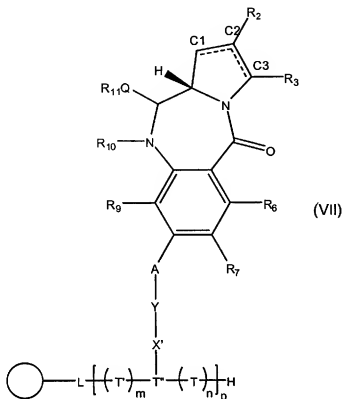
Q is S, O or NH; and

R₁₀ is a nitrogen protecting group.

59. (Previously presented) A collection of compounds according to claim 58, wherein R₁₀ has a carbamate functionality where it binds to the nitrogen atom at the 10 position of a PBD ring structure.

60. (Previously presented) A collection of compounds according to claim 58, wherein Q is O, and/or R₁₁ is H.

61. (Currently amended) A collection of compounds all of which are represented by formula VII:



wherein:

A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are is a positive integer $[[s]]$ from 1 to 16 $[[l]]$ and m is 1, or except that one of them may be zero;

T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 4;

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X' ;

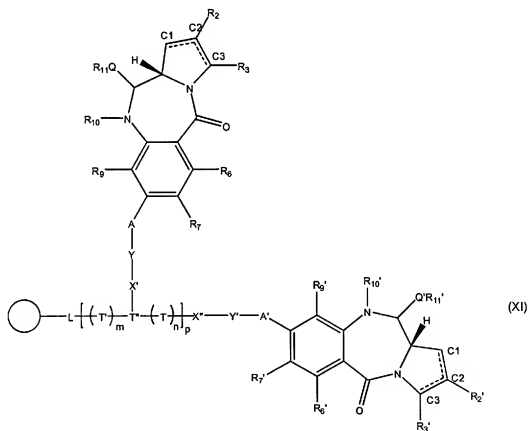
p is 1;

R_{11} is either H or R;

Q is S, O or NH; and

R_{10} is a nitrogen protecting group; and

62. (Currently amended) A collection of compounds all of which are represented by formula XI:



wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6 , R_7 , and R_8 are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

~~n and m are~~ is a positive integer[[s]] from 1 to 16[[.]] m is 1, or except that one of them may be zero;

~~T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 4;~~

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is 1;

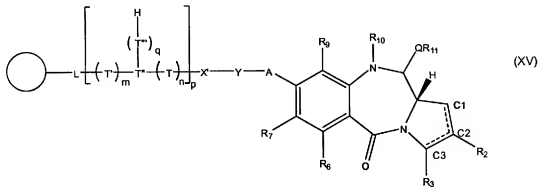
R_{11} is either H or R;

Q is S, O or NH;

R_{10} is a nitrogen protecting group; and

Q', R'_{10} , R'_{11} , have the same definitions as Q, R_{10} , R_{11} , respectively.

63. (Currently amended) A collection of compounds all of which are represented by formula XV:



A is O, S, NH, or a single bond;

R₂ and R₃ are independently selected from: H, R, OH, OR, =O, =CH-R, =CH₂, CH₂-CO₂R, CH₂-CO₂H, CH₂-SO₂R, O-SO₂R, CO₂R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R₆, R₇, and R₉ are independently selected from H, R, OH, OR, halo, nitro, amino, Me₃Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group of up to 12 carbon atoms whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is an amino acid residue combinatorial unit, where each T may be different if n is greater than 1;

L is a linking group, or a single bond;

⊙ is a solid support;

~~n and m are~~ n is a positive integer [s] from 1 to 16 [l.] m is 1, or except that one of them may be zero;

~~T' is an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;~~

T'' is an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is 1;

T'" and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, for each repeating unit the meaning of T, T', T'" and the values of n, m and q may be independently selected;

R₁₁ is either H or R;

Q is S, O or NH; and

R₁₀ is a nitrogen protecting group,[[.]]

64. Canceled.